

VALUE ADDED PROCESSES AT FOOD MARKET SYSTEM FOR DEVELOPING AND EMERGING INDUSTRIAL ECONOMIES: REVIEW PAPER

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Abstract

The goal of this paper is to introduce a comprehensive literature review on food supply chain from marketing, management and economics perspectives. The intensification of value added processes (VAP) at food market has positive socio-economic impacts on developing and emerging industrial economies. The paper presents both the theoretical and practical aspects of VAP at food market system, including economic and statistical data. The author recommends using VAP at food market system in order to modernize food-processing equipment, diversify food products, create job opportunities and establish food security.

Keywords: *food market, value added, socio-economic impacts, developing and emerging industrial economies.*

JEL Classification: *M11*

1 Introduction

Value added processes (VAP) at food market system are to transform primary agricultural commodities from their original form to a more valuable one. It is not only increasing values of the agricultural products, but also reducing deterioration risks, diversifying agricultural commodities and providing food security as well. Moreover, processed food products have longer food durability than raw agricultural products. In case of difficult periods caused by natural phenomenon,

food products with high value added are very important to moderate negative influences.

Publications focusing on VAP at food market system for developing and emerging industrial economies (DEIEs) can be found in studies of Dani, S. (2015), Anderson, D.P. and Hanselka, D. (2009), Goletti, F. and Samman, E. (2002). The studies conducted on value added processes, food supply chain from management, marketing and social perspectives, exporting high-value food commodities, as well as post-harvest systems in world agriculture in general. Anderson and Hanselka (2009) state that value is usually created by focusing on the benefits associated with the agribusiness product or service that arise from quality, functionality, form, place, time and the ease of possession. A product should have one or more of these qualities to generate additional value. As for Dani (2015), food sector is able to make innovations in food products, business models, packaging, technology, which adds value in the supply chain. Goletti and Samman (2002) claim that processed agricultural products have provided a crucial source of export revenue to developing countries, particularly in the light of the long-term trend towards declining prices for traditional agricultural commodity exports. With increasing population of the world, demand for agricultural production also grows due to provide food sources for humanity. Agricultural development is highly differentiated and production is concentrated in economically developed countries that achieve high production efficiency, labour productivity and low employment. Except developed countries, the share of agriculture in national economy is also crucial in less developed countries (Nagyová, et al. 2016). Similarities due to common historical, political and cultural background form the first supposition for better understanding of intercultural differences and business distance, and consequently contribute to further trade development (Galova, 2013). The success of the new product on the market depends on well-developed communication strategy (Kubicová and Kádeková, 2011).

VAP at food market system for DEIEs can be described from marketing, management and economics perspectives. The marketing of food supply chain specify the increasing the value of food products while passing through the stages of being developed, processed or produced by using e-business in food value chain, new methods of technology or recipes, communication, labelling, packaging, advertisement etc. Moreover, the main two factors such as food product quality and cost have significant impact on the buying behaviours of customers. Quality of products may be considered as a significant factor that contributes to creating a strong image in today's highly competitive environment (Šugrova, et al. 2017). When analysing food consumption in developed and developing countries, it can be seen that people in developed countries buy more processed foods than people

in developing countries. There is positive correlation: the more the country is developing, the more people are consuming processed food and vice versa.

There are the long chain of intermediaries as well as existing waste issues after processing raw agricultural commodities in the most of developing countries. Therefore, producers depend on effective management, which shorten a long food supply chain and environmentally friendly ways to dispose of waste. Activities during preparing finished food products are divided into value add and non-value add (overproduction, transportation, over-processing, inventory, creativity, waste control). Both of them require cost and time from producers, but customers pay only for value added activities (Ohno, 1988). For this reason, producers try to minimize costs in order to satisfy customers with the price of food products. The common practice of food supply chains in developing countries shows that farmers harvest crops and sell them to collectors. In turn, they add hired labor, taxes, financial and fixed costs to the farmers' price and resell to processors for preparing finished products. The next step is to deliver ready-to-use products to retailers, who also add their value and finally present the product to the consumers. It is recommended to shorten these procedures by involving farmers in agribusiness, so that farmers will have the opportunity to sell their products directly to consumers.

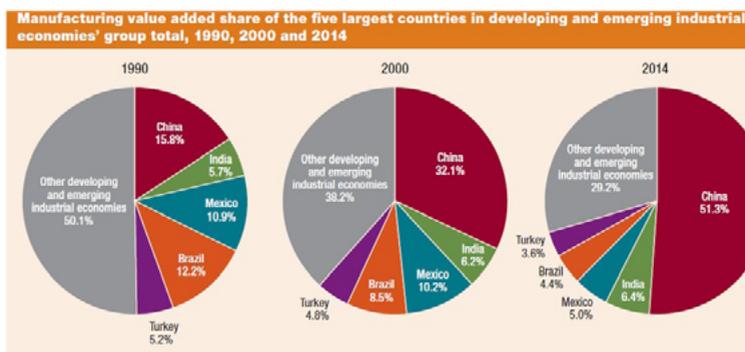
2 Data and Methods

The most of DEIEs have a high dependence on the export of raw agricultural commodities. This can lead to economic crisis due to the unstable prices of agricultural commodities in world market. The intensification of value added processes at food market has positive socio-economic impacts on DEIEs. Value added processes at food market system play important socio-economic role in DEIEs by supporting people with job opportunities and improving infrastructure. The economic advantages of value added processes are increasing the share of finished goods in export, supplying import-substituting products.

As stated by the Industrial Development Report 2016, manufacturing remains the main driving force of economic growth, largely attributable to its higher productivity and scope for innovation as well as the fact that over the past few decades, the majority of global manufacturing has steadily shifted from West to East and from North to South. The report also informs that since the beginning of the century, rapid growth in the manufacturing value added has been a major source of poverty reduction in many developing and emerging industrial economies through employment creation and income generation. Based on statistic calculation, the IDR 2016 has forecasted positive scenario in which DEIEs still

have considerable capacity for manufacturing growth and technological progress in the coming decades. However, such a rapid growth of DEEIs is the expense of certain countries such as China, India, Mexico, Brazil and Turkey (Figure 1).

Figure 1 **Manufacturing value added share of the five largest countries in developing and emerging industrial economies' group total, 1990, 2000 and 2014**



Source: United Nations Industrial Development Organization, 2015.

China's impact on the manufacturing value added growth rate in DEIEs is very important, as the country's share increased from 15.8 % in 1990 to 51.3 % in 2014 (UNIDO, 2016). The share of value added agriculture on the GDP in 2014 reached the value 3.1% globally. In comparison to other sectors of the world economy (industry and services), this share was very low (Rovný, 2016). Analyzing the sectoral composition of world manufacturing value added in 2000, 2005 and 2013, food and beverages have the highest share in three years in the world. It shows the food market system has been before and will be still the most important sector in the future (Table 1).

Table 1 **Share of manufacturing value added, by industry group within country groups and worldwide, 2000, 2005 and 2013 (percent)**

International Standard Industrial Classification (ISIC) description	Industrialized countries			DEIEs			World		
	2000	2005	2013	2000	2005	2013	2000	2005	2013
Food and beverages	11.0	11.4	11.2	16.6	14.9	13.3	12.1	12.2	12.0
Tobacco products	1.1	0.9	0.7	3.5	2.9	2.5	1.6	1.4	1.4
Textiles	2.3	1.8	1.1	5.9	5.3	4.5	3.0	2.7	2.5
Wearing apparel, fur	1.7	1.0	0.7	3.8	3.4	2.9	2.1	1.6	1.6

International Standard Industrial Classification (ISIC) description	Industrialized countries			DEIEs			World		
	2000	2005	2013	2000	2005	2013	2000	2005	2013
Leather, leather products and footwear	0.7	0.4	0.3	2.0	1.4	1.3	0.9	0.7	0.7
Wood products (excluding furniture)	2.0	2.0	1.5	1.7	1.4	1.4	1.9	1.8	1.5
Paper and paper products	3.0	2.8	2.4	3.0	2.9	2.7	3.0	2.9	2.5
Printing and publishing	4.6	4.2	3.4	2.1	1.8	1.4	4.1	3.6	2.6
Coke, refined petroleum products, nuclear fuel	3.1	3.5	3.2	6.2	5.2	3.7	3.7	3.9	3.4
Chemicals and chemical products	11.0	12.0	12.0	11.2	11.2	11.1	11.0	11.8	11.7
Rubber and plastic products	4.7	4.6	4.4	3.4	3.5	3.3	4.5	4.3	3.9
Non-metallic mineral products	4.0	3.8	3.1	5.5	5.4	5.8	4.3	4.2	4.2
Basic metals	5.0	5.0	4.5	7.8	10.0	11.2	5.5	6.2	7.1
Fabricated metal products	8.0	7.5	7.1	3.9	4.0	4.6	7.2	6.6	6.1
Machinery and equipment (not elsewhere classified)	9.7	9.7	9.2	4.8	5.9	7.4	8.8	8.7	8.5
Office, accounting and computing machinery	1.5	1.4	2.0	1.2	1.5	1.5	1.5	1.5	1.8
Electrical machinery and apparatus	4.0	3.8	3.9	2.8	3.3	4.5	3.8	3.6	4.1
Radio, television and communication equipment	5.2	6.2	9.7	3.7	4.6	5.1	4.9	5.8	7.9
Medical, precision and optical instruments	3.5	3.9	4.7	0.7	0.9	1.1	3.0	3.1	3.3
Motor vehicles, trailers, semi-trailers	7.7	8.3	8.3	6.2	6.4	6.7	7.4	7.8	7.7
Other transport equipment	2.9	3.0	3.8	1.5	1.7	1.9	2.6	2.7	3.1

International Standard Industrial Classification (ISIC) description	Industrialized countries			DEIEs			World		
	2000	2005	2013	2000	2005	2013	2000	2005	2013
Furniture, manufacturing (not elsewhere classified)	3.3	3.0	2.7	2.3	2.3	2.1	3.1	2.8	2.5
Total	100	100	100	100	100	100	100	100	100

Source: United Nations Industrial Development Organization, 2015.

The demand for food and beverage products is growing due to increase in the number of the world population each year as well as these products being the main source for life. Continuing to produce more high value added agriculture products and encouraging investment to this sector improve other related branches: people welfare, rural development, and infrastructure.

3 Results and Discussion

There is a need to run agribusiness in rural areas, i.e. small and medium enterprises (SMEs) close to farms are required to open up, so that farmers will have the opportunity to sell their products directly to customers. It creates job vacancies, extra farmers' income, and suitable economic infrastructure in rural areas as well as acceptable price for customers. To improve socio-economic development in rural areas, DEIEs with agriculture advantage should pay attention more on value added processes at food market system and create conditions (organizational, legal and regulatory bases) for involving farmers in agribusiness.

4 Conclusion

The common practice of long chain of intermediaries should be reduced by implementing the practice "from farm to fork". In other words, there is a need to attract farmers to open small food processing companies close to their farms. In this case, the price of food products is minimized as well as customers have food products with acceptable price. Secondly, value added processes at food market system play important socio-economic role in DEIEs. The economic advantages of value added processes are increasing the share of finished goods in export, supplying import-substituting products, improving infrastructure and growing people's income. Currently, the rapid growth of manufacturing value added among

DEIEs appertains to China, India, Mexico, Brazil and Turkey. The other DEIEs should also improve value added processes at food market system by establishing tax incentives and allocate preferential credits for agribusiness.

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